

Remarks

Claims 1-21 are pending. Claims 1, 5, 8-12, 14, 16 and 19-21 were amended to particularly point out and distinctly claim Applicant's invention, as is discussed below in connection with the section Objections to the Claims.

OBJECTIONS TO THE CLAIMS

The Examiner objects to Claims 1, 11 and 21 on the ground of informalities. The Examiner states that the term "NT" "should incorporate with its full form."

As was suggested by the Examiner, the term "NT" has been replaced by "New Technology".

Claim 1, as amended, recites "New Technology File Structure". It is submitted that this recital is clear to one of ordinary skill in the art. The specification (page 1, lines 17-18) defines "NT File Structure" as being equivalent to "NTFS". It is submitted that "NTFS" is also clear to one of ordinary skill in the art. See, for example, attached Exhibit 1 (page 1, first paragraph), which defines NTFS as the "New Technology" File System. See, also, Berghel et al., page 1, ¶3 (of record).

Claims 11 and 21, as both are amended, include a similar recital of "New Technology File Structure" as Claim 1. It is submitted that this recital is clear for the same reasons.

Claims 5, 8-10, 12, 14, 16, 19 and 20 have been amended in a like manner.

Since the objections to Claims 1 and 11 have been dealt with, it is submitted that any objections to Claims 2-10 and 12-20, which depend from Claims 1 and 11, respectively, have also been dealt with.

REJECTIONS UNDER 35 U.S.C. § 112, ¶2

The Examiner rejects Claims 1-21 under 35 U.S.C. § 112, second paragraph, on the ground of being indefinite.

The Examiner states that the term "installer" is unclear. As to Claims 1, 11 and 21, the Examiner further states (*emphasis added*) that the term installer is unclear "as ... used to install the file or the files are simply gets copied where ***no installer is needed***. In the claim language it seems that the files are only copying from one location to another."

It is respectfully stated that the Examiner has not responded to any of the previous remarks directed to this rejection, other than to state (Office Action, page 2) that it "further applies to new claim 21." First of all, the Examiner is of the unsupported position that "no installer is needed". It is respectfully submitted that this unsupported position is not well taken in view of the refined recitals (*emphasis added*) of Claim 1 of "***employing an***

*installer*"; "writing a Primary Data Stream file to said New Technology File Structure logical volume *from said installer*"; and "writing said associated data to said New Technology File Structure logical volume as an Alternate Data Stream file *from said installer*". Hence, since the recited installer is employed, and since both a Primary Data Stream file and associated data as an Alternate Data Stream file are written to an New Technology File Structure logical volume from the installer, it is respectfully submitted that the unsupported position that "no installer is needed" cannot reasonably be supported. What is the logic or evidence by which the Examiner holds that "no installer is needed"?

Claim 11 recites (*emphasis added*) the "*installer cooperating with said processor to write* a Primary Data Stream file to said New Technology File Structure logical volume, *associate* data with said Primary Data Stream file, and *write* said associated data to said New Technology File Structure logical volume as an Alternate Data Stream file." For similar reasons as were discussed above in connection with Claim 1, it is respectfully submitted that the position that "no installer is needed" cannot reasonably be supported. The recited installer cooperates with the processor to write a Primary Data Stream file to the New Technology File Structure logical volume. The recited installer also cooperates with the processor to associate data with the Primary Data Stream file. The recited installer further cooperates with the processor to write the associated data to the New Technology File Structure logical volume as an Alternate Data Stream file. Again, what is the logic or evidence by which the Examiner holds that "no installer is needed"?

Claim 21 recites (*emphasis added*) "*employing an installer*; writing a Primary Data Stream file to said New Technology File Structure logical volume of said computer-readable medium *from said installer*; associating data with said Primary Data Stream file; and writing said associated data to said New Technology File Structure logical volume of said computer-readable medium as an Alternate Data Stream file *from said installer*". For similar reasons as were discussed above in connection with Claim 1, it is respectfully submitted that the position that "no installer is needed" cannot reasonably be supported. Again, what is the logic or evidence by which the Examiner holds that "no installer is needed"?

Since the Examiner has the burden of proof for any rejection, but has not responded to any of the previous remarks directed to this rejection, then to the extent that the Examiner might continue to hold that Applicant's arguments in this regard are "not persuasive," clarification of the Examiner's position is respectfully requested.

Secondly, the term “installer” is understood by those of ordinary skill in the art. See, for example, U.S. Patent No. 6,744,450 (Zimniewicz et al.) (col. 6, l. 45, reciting “existing installer technology”) (of record).

Again, since the Examiner has the burden of proof for any rejection, but has not responded to any of the previous remarks directed to this rejection, then to the extent that the Examiner might continue to hold that Applicant’s arguments in this regard are “not persuasive,” clarification of the Examiner’s position is respectfully requested.

Therefore, it is submitted that the recited installer of Claims 1, 11 and 21 is definite and passes muster under Section 112, second paragraph.

As to the recital “associating data” of Claims 1 and 21, the Examiner states that it is “unclear as to what data is being associated with Primary Data Stream”. As was discussed above, Claim 1 recites “associating data with said Primary Data Stream file; and writing said associated data to said New Technology File Structure logical volume as an Alternate Data Stream file from said installer.” Within the context of Claim 1, it is respectfully submitted that Applicant may recite “data” as broadly as possible without limiting said data. As is stated in Section 2173.04 of the Manual of Patent Examining Procedure (MPEP):

Breadth of a claim is not to be equated with indefiniteness.

*In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971).

If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph.

MPEP § 2173.04. Hence, it is submitted that the recital “associating data” of Claim 1 is definite and passes muster under Section 112, second paragraph.

Claim 21 recites “associating data with said Primary Data Stream file; and writing said associated data to said New Technology File Structure logical volume of said computer-readable medium as an Alternate Data Stream file from said installer.” Within the context of Claim 21, it is respectfully submitted that Applicant may recite “data” as broadly as possible without limiting said data. MPEP § 2173.04. Therefore, it is submitted that the recital “associating data” of Claim 21 is definite and passes muster under Section 112, second paragraph.

To the extent that the Examiner may have any authority to the contrary, then citation of that authority is respectfully requested. Since the Examiner has the burden of

proof for any rejection and has not responded to any of the previous remarks directed to this rejection, then to the extent that the Examiner might continue to hold that Applicant's arguments in this regard are "not persuasive," clarification of the Examiner's position is respectfully requested.

Since the rejections to Claims 1 and 11 have been dealt with, it is submitted that the rejections of Claims 2-10 and 12-20, which depend from Claims 1 and 11, respectively, have also been dealt with.

**REJECTIONS UNDER 35 U.S.C. § 102(a)**

The Examiner rejects Claims 1, 3-5, 8-12, 14-16 and 19-21 on the ground of being anticipated by "Phishing in Alternate Data Streams" (Berghel et al.).

Berghel et al. discloses primary and alternate data streams (ADSs) in the New Technology File System (NTFS) of Microsoft. This reference also discloses that (page 1) a "large number of alternate data streams (ADSs) may be associated with a single primary data stream (PDS)", that (pages 3-4) a user renames <calc.exe> as the ADS, <d.exe>, and associates it with an empty text file <test.txt> by employing a command line of a DOS command prompt window, and that (page 6) there is "malware" that takes advantage of ADSs (e.g., W2k.stream).

Claim 1 recites, *inter alia*, a method for secure installation and operation of software comprising: employing an New Technology File Structure logical volume; employing an installer; writing a Primary Data Stream file to the New Technology File Structure logical volume from the installer; associating data with the Primary Data Stream file; and writing the associated data to the New Technology File Structure logical volume as an Alternate Data Stream file from the installer.

Claim 1 recites employing an *installer*; writing a Primary Data Stream file to an New Technology File Structure logical volume *from* such *installer*; *and* writing associated data with the Primary Data Stream file and to the New Technology File Structure logical volume as an Alternate Data Stream file *from* such *installer*.

The Examiner admits (Office Action, page 8) that Berghel et al. is silent on an installer, but concludes (Office Action, page 8) that this feature is "deemed to be inherent". The Examiner states (Office Action, page 8) that Berghel et al. discloses "ADS contains binary executables (page 4, section Phishing and Executable Streams)," concludes (Office Action, page 4) that "obviously [an] installer is present to create executables (page 4, section Phishing and Executable Streams)," and concludes (Office Action, page 8) that the system of

the reference would be “inoperative if the installer is not present to provide ADS from PDS that includes executable file.” These conclusions are respectfully traversed.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

For the following reasons, it is respectfully submitted that the Examiner improperly uses impermissible hindsight to reach the above conclusions in view of Applicant’s refined recital in Claim 1. First of all, Berghel et al. (page 3, last line, and page 4) makes crystal clear that:

We now rename <calc.exe> as the ADS, <d.exe>, and associate it with the empty text file <test.txt>

C:\...\test>type c:\windows\system32\calc.exe > .\test.txt:d.exe

and execute the ADS directly

C:\...\test>start .\test.txt:d.exe

This has nothing to do with any installer within the context of Claim 1 as is understood by those of ordinary skill in the art. Here, the user is merely renaming files through a command line of a DOS command prompt window. This point was raised in the previous Amendment (pages 11-12) and it is noted that the Examiner has not addressed this point in the present Office Action.

Second, the Examiner’s conclusion that “obviously [an] installer is present to create executables (page 4, section Phishing and Executable Streams),” ignores the express teaching of the reference (page 3, last line, and page 4, first line) where a user renames <calc.exe> as the ADS, <d.exe>, and associates it with the empty text file <test.txt> by employing a command line of a DOS command prompt window (C:\...\test>type c:\windows\system32\calc.exe > .\test.txt:d.exe). Here, there is no installer present and no such installer is taught, suggested or inherent. It is a well-known principle of patent law that an examiner cannot fragment the teachings of a prior art reference but must, instead, consider each reference as a whole.<sup>1</sup> In other words, the Examiner cannot excise and ignore, for

---

<sup>1</sup> “The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination.” MPEP § 2141 (p. 2100-125).

example, the express teaching of the last line of page 3 and the first line of page 4 of the reference.

Third, as to the Examiner's conclusion that the system of the reference would be "inoperative if the installer is not present to provide ADS from PDS that includes executable file," it is respectfully submitted that this cannot be true since the reference expressly teaches that it renames files through a command line of a DOS command prompt window. Hence, the reference is operative and no installer is present, suggested or inherent.

Fourth, Berghel et al. teaches and suggests a W2K.Stream virus. When this virus infects a file it replaces a host application with itself. Basically, the virus implements the simplest possible virus infection by overwriting the host program with its own code. A virus is completely different from the recited *installer* and does not install or upgrade files in a traditional sense. Instead, a virus usually overwrites existing files or exists as a parasite within existing files. This view is confirmed by the express teachings of Berghel et al., which states (page 6, at [www.sarc.com/avcenter/venc/data/w2k.stream.html](http://www.sarc.com/avcenter/venc/data/w2k.stream.html) (of record as Cite No. B, "W2K.Stream")):

The virus is basically a new subclass of companion viruses, a "stream companion" virus. When the virus infects a file it replaces the host application with itself. Basically the virus implements the simplest possible virus infection by overwriting the host program with its own code.

Hence, a virus replaces a host application with itself. This view is also supported by Exhibit 4 of the Petition To Make Special Pursuant to 37 CFR 1.102(d), filed on October 21, 2004 (of record), which provides a definition of "virus" namely a "program that can 'infect' other programs by modifying them to include a, possibly evolved, copy of itself. A program that infects a computer by attaching itself to another program, and propagating itself when that program is executed." Furthermore, a malware virus is a "program or piece of code that is loaded onto your computer without your knowledge and runs against your wishes." See Exhibit 5 of the Petition To Make Special Pursuant to 37 CFR 1.102(d) (of record).

In view of the above, it is respectfully submitted that the Examiner's conclusions regarding an inherent installer are based upon improper hindsight.

As to the recitals of writing a Primary Data Stream file to an New Technology File Structure logical volume from an installer, and writing associated data with a Primary Data Stream file and to an New Technology File Structure logical volume as an Alternate Data Stream file from an installer, the Examiner relies on page 1 of the reference wherein it is stated that "large number of alternate data streams (ADSs) may be associated with a single

primary data stream (PDS)”. This text, however, in no way teaches or suggests any installer, much less writing a Primary Data Stream file to an New Technology File Structure logical volume *from* an *installer*, or writing associated data with a Primary Data Stream file and to an New Technology File Structure logical volume as an Alternate Data Stream file *from* an *installer*. As was discussed above, it is submitted that the single reference deals with a DOS command line or a virus, neither of which teaches or suggests an *installer*.

The reference does not teach or suggest the refined recital of employing an *installer*; writing a Primary Data Stream file to an New Technology File Structure logical volume *from* such *installer*; *and* writing associated data with the Primary Data Stream file to the New Technology File Structure logical volume as an Alternate Data Stream file *from* such *installer*.

Accordingly, for the above reasons, Claim 1 patentably distinguishes over the reference.

Claims 3-5 and 8-10 depend either directly or indirectly from Claim 1 and patentably distinguish over the reference for the same reasons.

Furthermore, Claim 5 recites creating a Primary Data Stream directory chain; writing the Primary Data Stream directory chain to the New Technology File Structure logical volume *from* the *installer*; writing the Primary Data Stream file to the Primary Data Stream directory chain in the New Technology File Structure logical volume *from* the *installer*; associating the data with the Primary Data Stream directory chain or the Primary Data Stream file by creating and closing the Alternate Data Stream file; and *installing* the associated data to the New Technology File Structure logical volume as the Alternate Data Stream file *from* the *installer*.

Since the reference neither teaches nor suggests the refined recital of Claim 1, it clearly neither teaches nor suggests these additional limitations which further patentably distinguish over the reference.

The Examiner’s reliance on the command line of a DOS command prompt window (Berghel et al. (page 2) (“First, open a DOS command prompt window.”)) has nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

Furthermore, Claim 8 recites employing as the associated data first data; employing as the Alternate Data Stream file a first Alternate Data Stream file; employing second data; associating the second data with the Primary Data Stream file; and writing the

associated second data to the New Technology File Structure logical volume as a second Alternate Data Stream file *from the installer*.

Since the reference neither teaches nor suggests the refined recital of Claim 1, it clearly neither teaches nor suggests these additional limitations which further patentably distinguish over the reference.

Again, the Examiner's apparent reliance on the command line of a DOS command prompt window, and the Examiner's citation of "large number..." from page 1 of the reference, as both were discussed above in connection with Claim 1, have nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

Furthermore, Claim 10, which depends from Claim 1 and includes all of the limitations thereof, recites employing an *installation* file; defining in the installation file a Primary Data Stream directory chain, the Primary Data Stream file, the Alternate Data Stream file, and at least one information file; displaying the at least one information file from the installation file; creating the Primary Data Stream directory chain in the New Technology File Structure logical volume; copying the Primary Data Stream file from the installation file to the Primary Data Stream directory chain in the New Technology File Structure logical volume; and copying the Alternate Data Stream file from the installation file to the Primary Data Stream directory chain in the New Technology File Structure logical volume.

Since the reference neither teaches nor suggests the refined recital of Claim 1, its clearly neither teaches nor suggests these additional limitations which further distinguish over the reference.

Again, the Examiner's reliance on the command line of a DOS command prompt window (Berghel et al. (pages 2-4 and 9)) has nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

Claim 11 is an independent claim which recites, *inter alia*, a computer system for secure installation and operation of software comprising: a processor; a first drive adapted for access by the processor; a second drive adapted for access by the processor, the second drive including an New Technology File Structure logical volume; and an installer operatively associated with the first drive, the installer cooperating with the processor to write a Primary Data Stream file to the New Technology File Structure logical volume, associate data with the Primary Data Stream file, and write the associated data to the New Technology File Structure logical volume as an Alternate Data Stream file.

The Examiner admits that Berghel et al. is silent on the recited installer. The Examiner states (Office Action, page 8) that this feature is “deemed to be inherent to Berghel system.” The Examiner further states (Office Action, page 8) that Berghel et al. (page 4) discloses “ADS contains binary executables” and that it would be “inoperative if the installer is not present to provide ADS from PDS that includes [an] executable file.” These statements were respectfully traversed, above, in connection with Claim 1. Again, these statements have nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art. The user in Berghel et al. is merely renaming files through a command line of a DOS command prompt window. This also does not teach or suggest an installer within the context of Claim 11.

For reasons that were discussed above in connection with Claim 1, a virus is completely different from the recited *installer* and does not install or upgrade files in a traditional sense. Instead, a virus usually overwrites existing files or exists as a parasite within existing files, and replaces a host application with itself. Furthermore, a malware virus is a “program or piece of code that is loaded onto your computer without your knowledge and runs against your wishes.”

The reference does not teach or suggest the refined recital of a computer system for secure installation and operation of software comprising: an *installer* operatively associated with a first drive, such *installer* cooperating with a processor to write a Primary Data Stream file to an New Technology File Structure logical volume, associate data with such Primary Data Stream file, and write such associated data to such New Technology File Structure logical volume as an Alternate Data Stream file.

Therefore, for the above reasons, Claim 11 patentably distinguishes over the reference.

Claims 12, 14-16, 19 and 20 depend either directly or indirectly from Claim 11 and patentably distinguish over the reference for the same reasons.

Furthermore, Claim 12 recites that the New Technology File Structure logical volume includes a directory chain or a system directory; and that the *installer* installs the Primary Data Stream file in the directory chain or the system directory of the New Technology File Structure logical volume.

Since the reference neither teaches nor suggests the refined recital of Claim 11, it clearly neither teaches nor suggests these additional limitations which further patentably distinguish over the reference.

Again, the Examiner's reliance on the command line of a DOS command prompt window has nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

Furthermore, Claim 16 recites that the *installer* cooperates with the processor to create a Primary Data Stream directory chain, to write the Primary Data Stream directory chain to the New Technology File Structure logical volume, to write the Primary Data Stream file to the Primary Data Stream directory chain in the New Technology File Structure logical volume, to associate the data with the Primary Data Stream directory chain or the Primary Data Stream file, and to install the associated data to the New Technology File Structure logical volume as the Alternate Data Stream file.

Since the reference neither teaches nor suggests the refined recital of Claim 11, it clearly neither teaches nor suggests these additional limitations which further patentably distinguish over the reference.

Again, the Examiner's reliance on the command line of a DOS command prompt window has nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

Furthermore, Claim 20 recites that the processor includes a display; that the *installer* comprises an *installation* file including a Primary Data Stream directory chain, the Primary Data Stream file, the Alternate Data Stream file, and at least one information file; and that the *installer* cooperates with the processor to display the at least one information file from the installation file to the display, to create the Primary Data Stream directory chain in the New Technology File Structure logical volume, to copy the Primary Data Stream file from the installation file to the Primary Data Stream directory chain in the New Technology File Structure logical volume, and to copy the Alternate Data Stream file from the installation file to the Primary Data Stream directory chain in the New Technology File Structure logical volume.

Claim 20 further patentably distinguishes over the reference for similar reasons as were discussed above in connection with Claim 10.

Claim 21 is an independent method claim which recites, *inter alia*, a method for secure installation and operation of software comprising: employing a computer-readable medium including an New Technology File Structure logical volume; employing an installer; writing a Primary Data Stream file to the New Technology File Structure logical volume of the computer-readable medium from the installer; associating data with the Primary Data

Stream file; and writing the associated data to the New Technology File Structure logical volume of the computer-readable medium as an Alternate Data Stream file from the installer.

For similar reasons as were discussed above in connection with Claim 1, the reference does not teach or suggest employing an *installer*; writing a Primary Data Stream file to an New Technology File Structure logical volume of a computer-readable medium *from* such *installer*; associating data with such Primary Data Stream file; and writing such associated data to such New Technology File Structure logical volume of such computer-readable medium as an Alternate Data Stream file *from* such *installer*.

Therefore, for the above reasons, Claim 21 patentably distinguishes over the reference.

#### **REJECTIONS UNDER 35 U.S.C. § 103(a)**

The Examiner rejects Claims 2, 6, 7, 13, 17 and 18 on the ground of being unpatentable over Berghel et al. in view of U.S. Patent No. 6,744,450 (Zimniewicz et al.).

Zimniewicz et al. discloses a system and method for a suite integration toolkit (SIT) allowing for the provision and display of a set of installation actions.

Zimniewicz et al., which does not disclose any Primary Data Stream file or any Alternate Data Stream file, adds nothing to Berghel et al. regarding writing a Primary Data Stream file or an Alternate Data Stream file to an New Technology File Structure logical volume from an installer to render Claims 1 or 11 unpatentable.<sup>2</sup>

Claims 2, 6 and 7 depend directly or indirectly from Claim 1 and patentably distinguish over the references for the same reasons.

Furthermore, Claim 6 recites employing an *installation* file comprising the Primary Data Stream file, the Alternate Data Stream file, installation instructions, the Primary Data Stream directory chain, and an End User License Agreement.

Claim 6 depends directly from Claim 5 and indirectly from Claim 1 and includes all of the limitations of those claims. Since the references neither teach nor suggest the refined recital of Claim 5, they clearly neither teach nor suggest these additional limitations which further patentably distinguish over the references.

Again, the Examiner's reliance on the command line of a DOS command prompt window (Berghel et al. (page 2)) or the "large number..." (Berghel et al. (page 1)) has nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

---

<sup>2</sup> The Examiner's comments regarding Zimniewicz et al. on page 4 of the Office Action do not pertain to Claims 1 or 11.

Claims 17 and 18 depend directly or indirectly from Claim 11 and patentably distinguish over the references for the same reasons.

Furthermore, Claim 17 recites that the *installer* comprises an *installation* file comprising the Primary Data Stream file, the Alternate Data Stream file, installation instructions, a Primary Data Stream directory chain, and an End User License Agreement.

Claim 17 further patentably distinguishes over the references for similar reasons as were discussed above in connection with Claim 6.

Furthermore, Claim 18 recites that the processor includes a display; and that the *installer* cooperates with the processor to display the installation instructions and the End User License Agreement on the display.

Since the references neither teach nor suggest the refined recital of Claims 11 and 17, they clearly neither teach nor suggest these additional limitations which further patentably distinguish over the references.

Again, the Examiner's reliance on the command line of a DOS command prompt window has nothing to do with any installer within the context of the claims and as understood by those of ordinary skill in the art.

Reconsideration and early allowance are respectfully requested.

Respectfully submitted,



Kirk D. Houser  
Registration No. 37,357  
Attorney for Applicant

(412) 566-6083